Meridian Environmental Consulting, LLC

December 4, 2019

Carrie Stoltz
Wisconsin Department of Natural Resources
107 Sutliff Avenue
Rhinelander, Wisconsin 54501

Subject: **Change Order:**

- **Pulse SVE system (3 months)**
- **Sample water supply from new well at Country Store (4 times: Dec, Jan, Feb, March)**

Site: Jim's Bar
W14764 Highway 73
Jump River, Wisconsin
PECFA No. 54433-9769-64
DNR BRRTS No. 03-61-000116
Meridian No. 05F781

**Scope of Work**

- **Pulse SVE system (3 months)**

The current budget for operating the SVE system has expired. The system was turned off in early November 2019. DNR staff recommend the SVE system be turned back on ("pulsed") for several months to address any "rebound" in concentrations that might occur. A budget for an additional 3 months of system operation (December, January, February) is included with this Change Order. This includes monthly system maintenance checks and air sampling (initial, monthly, and final). A drum of condensate water may accumulate so disposal costs are included.

- **Sample water supply from new well at Country Store (4 times: Dec, Jan, Feb, March)**

A new water supply well is currently being connected to the Country Store. We recommend this new well be sampled monthly (4X – December, January, February, March) for PVOC+Naphthalene.

The results will be forwarded to DNR each month.

2711 N. Elco Road • Fall Creek, WI 54742 • (715) 832-6608 • Fax (715) 832-6797

**Cost**

Cost Estimate attached.

Sincerely,
**MERIDIAN ENVIRONMENTAL CONSULTING, LLC**

Kenneth Shimko, PG
Project Manager

# Usual and Customary Standardized Invoice #26
# July 2019 - December 2019

RR-111a

PECFA #: 54433-9769-64
BRRTS #: 03-61-000116
Site Name: Jim's Bar
Site Address: Jump River

Vendor Name: Change Order
Invoice #: Change Order
Invoice Date: December 2019
Check #: Change Order

| | | |
|---|---|---|
| U&C Total | $ | 2,763.38 |
| Variance to U&C Total | $ | 8,881.76 |
| Grand Total | $ | 11,645.14 |

| TASK | TASK DESCRIPTION | SERVICES | ACTIVITY CODE | ACTIVITY REFERENCE CODE DESCRIPTION | UNIT | | MAX UNIT COST | UNITS | | TOTAL MAX |
|---|---|---|---|---|---|---|---|---|---|---|
| **Sample water from new well (Country Store) 4 X (December, January, February, March)(in conjunction with SVE system O&M where possible). Dispose drum condensate water. Report results (sampling and SVE operation (see below)).** | | | | | | | | | | |
| 1 | GW Sampling | | GS05 | Sample Collection | Well | $ | 74.62 | 4 | $ | 298.48 |
| 4 | Waste Disposal | Consultant | WD05 | Consultant Coordination | Site | $ | 141.24 | 1 | $ | 141.24 |
| 4 | Waste Disposal | Commodity | WD10 | GW Sample and/or Purge | Drum | $ | 43.37 | 1 | $ | 43.37 |
| 4 | Waste Disposal | Commodity | WD25 | Primary Mob/Demob | Site | $ | 316.47 | 1 | $ | 316.47 |
| 6 | Letter Report/Addendum | | LRA05 | Letter Report/Addendum | Letter | $ | 1,070.47 | 1 | $ | 1,070.47 |
| 33 | Schedule Of Laboratory Maximums | Commodity | | Laboratory (see task 33 total on Lab Schedule) | Lab Schedule | | | | $ | 500.12 |
| 36 | Change Order Request | | COR05 | Change Order Request (cost cap exceedance requests) | Change Order | $ | 393.23 | 1 | $ | 393.23 |
| Variance | | | | Operate SVE System 3 months (see attached cost breakdown) | | | | | $ | 8,881.76 |
| Variance | | | | | | | | | | |

# Usual and Customary Standardized Invoice #26
# July 2019 - December 2019 (Interim)


RR-111a

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **TOTAL LAB CHARGES** | **$ 500.12** | | **TASK 33** | **12** | **$ 500.12** | **TASK 24** | | **0** | **$ -** |
| MATRIX | REF CODE | REIMBURSABLE ANALYTE | UNITS | | MAX COST | SAMPLES | TOTAL | | MAX COST | SAMPLES | TOTAL | |
| AIR | A1 | Benzene | SAMPLE | $ | 46.29 | 4 | $ 185.16 | | | | | |
| AIR | A2 | BETX | SAMPLE | $ | 50.94 | | $ - | | | | | |
| AIR | A3 | GRO | SAMPLE | $ | 47.48 | 4 | $ 189.92 | | | | | |
| AIR | A4 | VOC's | SAMPLE | $ | 74.09 | | $ - | | | | | |
| WATER | W1 | GRO/PVOC | SAMPLE | $ | 30.07 | | $ - | | | | | |
| WATER | W2 | PVOC | SAMPLE | $ | 27.80 | | $ - | | | | | |
| WATER | W3 | PVOC + 1,2 DCA | SAMPLE | $ | 45.10 | | $ - | | | | | |
| WATER | W4 | PVOC + Naphthalene | SAMPLE | $ | 31.26 | 4 | $ 125.04 | | | | | |
| WATER | W5 | VOC | SAMPLE | $ | 74.09 | | $ - | | | | | |
| WATER | W6 | PAH | SAMPLE | $ | 75.17 | | $ - | | | | | |
| WATER | W7 | Lead | SAMPLE | $ | 12.76 | | $ - | | | | | |
| WATER | W8 | Cadmium | SAMPLE | $ | 13.96 | | $ - | | | | | |
| WATER | W9 | Hardness | SAMPLE | $ | 12.76 | | $ - | | | | | |
| WATER | W10 | BOD, Total | SAMPLE | $ | 24.34 | | $ - | | | | | |
| WATER | W11 | Nitrate | SAMPLE | $ | 11.58 | | $ - | | | | | |
| WATER | W12 | Total Kjeldahl | SAMPLE | $ | 20.88 | | $ - | | | | | |
| WATER | W13 | Ammonia | SAMPLE | $ | 17.42 | | $ - | | | | | |
| WATER | W14 | Sulfate | SAMPLE | $ | 10.50 | | $ - | | | | | |
| WATER | W15 | Iron | SAMPLE | $ | 10.50 | | $ - | | | | | |
| WATER | W16 | Manganese | SAMPLE | $ | 10.50 | | $ - | | | | | |
| WATER | W17 | Alkalinity | SAMPLE | $ | 10.50 | | $ - | | | | | |
| WATER | W18 | methane | SAMPLE | $ | 47.48 | | $ - | | | | | |
| WATER | W19 | Phosphorous | SAMPLE | $ | 18.60 | | $ - | | | | | |
| WATER | W20 | VOC Method 524.2 | SAMPLE | $ | 181.59 | | $ - | | | | | |
| WATER | W21 | EDB Method 504 | SAMPLE | $ | 98.31 | | $ - | | MAX COST | SAMPLES | TOTAL | |
| SOILS | S1 | GRO | SAMPLE | $ | 25.52 | | $ - | | $ 25.52 | | $ - | |
| SOILS | S2 | DRO | SAMPLE | $ | 31.26 | | $ - | | $ 31.26 | | $ - | |
| SOILS | S3 | GRO/PVOC | SAMPLE | $ | 28.98 | | $ - | | $ 28.98 | | $ - | |
| SOILS | S4 | PVOC | SAMPLE | $ | 26.60 | | $ - | | $ 26.60 | | $ - | |
| SOILS | S5 | PVOC + 1,2 DCA + Naphthalene | SAMPLE | $ | 50.94 | | $ - | | $ 50.94 | | $ - | |
| SOILS | S6 | PVOC + Naphthalene | SAMPLE | $ | 37.10 | | $ - | | $ 37.10 | | $ - | |
| SOILS | S7 | VOC | SAMPLE | $ | 74.09 | | $ - | | $ 74.09 | | $ - | |
| SOILS | S8 | SPLP Extraction VOC only | SAMPLE | $ | 52.13 | | $ - | | $ 52.13 | | $ - | |
| SOILS | S9 | PAH | SAMPLE | $ | 75.17 | | $ - | | $ 75.17 | | $ - | |
| SOILS | S10 | Lead | SAMPLE | $ | 12.76 | | $ - | | $ 12.76 | | $ - | |
| SOILS | S11 | Cadmium | SAMPLE | $ | 15.04 | | $ - | | | | **TASK 24 TOTAL** | **$ -** |
| SOILS | S12 | Free Liquid | SAMPLE | $ | 11.58 | | $ - | | | | | |
| SOILS | S13 | Flash Point | SAMPLE | $ | 26.60 | | $ - | | | | | |
| SOILS | S14 | Grain Size - dry | SAMPLE | $ | 44.02 | | $ - | | | | | |
| SOILS | S15 | Grain Size - wet | SAMPLE | $ | 59.05 | | $ - | | | | | |
| SOILS | S16 | Bulk Density | SAMPLE | $ | 13.96 | | $ - | | | | | |
| SOILS | S17 | Permeability | SAMPLE | $ | 42.83 | | $ - | | | | | |
| SOILS | S18 | Nitrogen as Total Kjeldahl | SAMPLE | $ | 20.88 | | $ - | | | | | |
| SOILS | S19 | Nitrogen as Ammonia | SAMPLE | $ | 17.42 | | $ - | | | | | |
| SOILS | S20 | % Organic Matter | SAMPLE | $ | 30.07 | | $ - | | | | | |
| SOILS | S21 | TOC as NPOC | SAMPLE | $ | 59.05 | | $ - | | | | | |
| SOILS | S22 | Soil Moisture Content | SAMPLE | $ | 7.03 | | $ - | | | | | |
| SOILS | S23 | Air Filled Porosity | SAMPLE | $ | 26.60 | | $ - | | | | | |
| SOILS | S24 | % Total Solids | SAMPLE | $ | 7.03 | | $ - | | | | | |
| SOILS | S25 | Field Capacity | SAMPLE | $ | 28.98 | | $ - | | | | | |
| SOILS | S26 | TCLP Lead | SAMPLE | $ | 85.65 | | $ - | | | | | |
| SOILS | S27 | Cation Exchange (Ca, MG, & K) | SAMPLE | $ | 27.80 | | $ - | | | | | |
| SOILS | S28 | TCLP Cadmium | SAMPLE | $ | 85.65 | | $ - | | | | | |
| SOILS | S29 | TCLP Benzene | SAMPLE | $ | 85.65 | | $ - | | | | | |
| LNAPL | LFPS01 | Viscosity + Density<br>Interfacial tension I (LNAPL/water [dyne/cm])<br>Interfacial tension II (LNAPL/air [dyne/cm])<br>Interfacial tension III (water/air) [dyne/cm]) | SAMPLE | $ | 578.17 | | $ - | | | | | |
| | | | | | | | **TASK 33 TOTAL** | **$ 500.12** | | | | |

# Budget: Soil Vapor Extraction (SVE) System O&M - 3 months

**Jims Bar/ Jump River, Wisconsin**
**Meridian No. 05F781**

| System Operation | Unit | Quantity | Rate | Total |
|---|---|---|---|---|
| System Operation (Startup -> Operate three months -> Shut down after 3 months = 4 trips) | | | | |
| Prep | hour | 1 | $94.13 | $94.13 |
| startup/sample/maintenance | hour | 4 | $94.13 | $376.52 |
| travel | hour | 3 | $94.13 | $282.39 |
| mileage | mile | 150 | $0.580 | $87.00 |
| Project Management | hour | 4 | $112.96 | $451.84 |
| Project Engineer | hour | 5 | $112.96 | $564.80 |
| Equipment | | | | |
| PID | day | 1 | $75.00 | $75.00 |
| air pump (rented from lab) | day | 1 | $60.00 | $60.00 |
| | | | ***Subtotal:*** | ***$1,991.68*** |
| | | | **X 4 events =** | **$7,966.72** |
| Contingency Mobilizations (estimate 1) | | | | |
| Field Time | | | | |
| Prep | hour | 1 | $94.13 | $94.13 |
| sample/maint | hour | 4 | $94.13 | $376.52 |
| travel | hour | 3 | $94.13 | $282.39 |
| mileage | mile | 150 | $0.580 | $87.00 |
| Equipment | | | | |
| PID | day | 1 | $75.00 | $75.00 |
| | | | **Subtotal:** | **$915.04** |
| Letter Report (see U&C Cost Summary) | | | | |
| | | | | |
| | | | **TOTAL:** | **$8,881.76** |

***See U&C for Air Samples, Waste Disposal (condensate water - 1 drum)***